CMR3U-01
CMR3U-02
CMR3U-04
CMR3U-06
MEW! CMR3U-10
ULTRA FAST RECOVERY RECTIFIER
3.0 AMP, 100 THRU 1000 VOLTS





## **FEATURES:**

- LOW COST
- SPECIAL SELECTIONS AVAILABLE
- HIGH RELIABILITY
- SUPERIOR LOT TO LOT CONSISTENCY
- GLASS PASSIVATED CHIP
- "C" BEND CONSTRUCTION PROVIDES STRAIN RELIEF WHEN MOUNTED ON PC BOARD

## **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 3.0 Amp Surface Mount Silicon Ultra Fast Recovery Rectifier is a high quality, well constructed, highly reliable component designed for use in all types of commercial, industrial, entertainment, computer, and automotive applications. To order devices on 16mm Tape and Reel (3000/13" Reel), add TR13 suffix to part number.

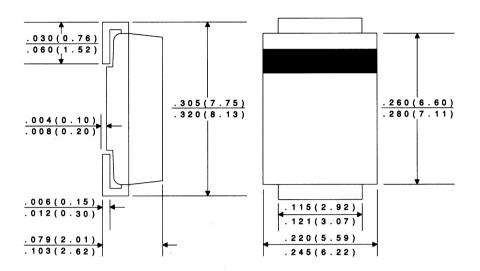
MAXIMUM RATINGS: (T<sub>A</sub>=25°C unless otherwise noted)

|   | SYMBOL              | CMR3U      | CMR3U      | CMR3U      | CMR3U      | CMR3U      | l     |
|---|---------------------|------------|------------|------------|------------|------------|-------|
|   |                     | <u>-01</u> | <u>-02</u> | <u>-04</u> | <u>-06</u> | <u>-10</u> | UNITS |
| Peak Repetitive Reverse Voltage               | $V_{RRM}$           | 100        | 200        | 400        | 600        | 1000       | V     |
| DC Blocking Voltage                           | $V_{R}$             | 100        | 200        | 400        | 600        | 1000       | V     |
| RMS Reverse Voltage                           | V <sub>R(RMS)</sub> | 70         | 140        | 280        | 420        | 700        | V     |
| Average Forward Current(T <sub>A</sub> =75°C) | 10                  |            |            | 3.0        |            |            | Α     |
| Peak Forward Surge Current (8.3ms)            | <sup>I</sup> FSM    |            |            | 150        |            |            | Α     |
| Operating and Storage                         |                     |            |            |            |            |            |       |
| Junction Temperature                          | $T_J$ , $T_{stg}$   |            | -6         | 55 to +17  | 5          |            | оС    |
| Thermal Resistance                            | Θ.11                |            |            | 10         |            |            | oC/W  |

## **ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

| SYMBOL          | TEST CONDITIONS MIN   | MAX  | UNITS |
|-----------------|---|------|-------|
| <sup>I</sup> R  | V <sub>R</sub> =Rated V <sub>RRM</sub>                                      | 5.0  | μΑ    |
| I <sub>R</sub>  | V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>A</sub> =100 <sup>o</sup> C | 500  | μA    |
| V <sub>F</sub>  | I <sub>F</sub> =3.0A, (CMR3U-01, CMR3U-02)                                  | 1.00 | V     |
| $V_{F}$         | I <sub>F</sub> =3.0A, (CMR3U-04)  | 1.25 | V     |
| $V_{F}$         | I <sub>F</sub> =3.0A, (CMR3U-06)  | 1.40 | V     |
| $V_{F}$         | I <sub>F</sub> =3.0A, (CMR3U-10)  | 1.70 | V     |
| t <sub>rr</sub> | I <sub>F</sub> =500mA, I <sub>R</sub> =1.0A, Irr=250mA (CMR3U-01, -02, -04) | 50   | ns    |
| t <sub>rr</sub> | I <sub>F</sub> =500mA, I <sub>R</sub> =1.0A, Irr=250mA (CMR3U-06, -10)      | 100  | ns    |

All dimensions in inches (mm).



## **Marking Codes:**

| DEVICE   | MARKING CODE |
|----------|--------------|
| CMR3U-01 | CU301        |
| CMR3U-02 | CU302        |
| CMR3U-04 | CU304        |
| CMR3U-06 | CU306        |
| CMR3U-10 | CU310        |

